

REMARKS/ARGUMENTS

Claims 18-27 are pending.

In the previously filed response, originally filed step (b) had been inadvertently amended and step (c) had been amended to be an inspecting step. By this supplemental amendment, steps (b) has been restored. The limitation presented in the previously filed response relating to further baking the resin at a temperature higher than the first temperature is now recited in step (c), and the inspecting step is a step (d).

The remarks made in the previously filed response are re-presented hereinbelow in the context of the currently amended claims.

Independent Claim 24

Claim 24 has been amended to include the temperature range limitation of claim 19. As amended, claim 24 recites in part:

- (a) sealing the semiconductor device in a package by surrounding it with thermosetting resin and thermally curing the resin at a first temperature;
- (b) baking the thermosetting resin at a second temperature not higher than the first temperature;
- (c) further baking the thermosetting resin at a third temperature higher than the first temperature, wherein the third temperature is between about 220°C and about 260°C; (underlining added to emphasize)

Uemura teaches in column 7, lines 1-11 heating baking resin 230 at 180° C and then removing portions of the resin using a photoresist method. The remaining resin is then baked at 300° C for 30 minutes until it is completely cured.

By contrast, the pending claims explicitly recite a third baking step (c) being performed between the temperature range of “220°C and about 260°C.” Uemura clearly does not teach this specific range. Moreover, it would not be obvious from Uemura to perform the second bake at a lowered temperature. Uemura clearly describes baking to achieve a complete cure. *Col. 7, lines 10-11*. As it is, baking at 300° C requires 30 minutes. Baking at a lower temperature, such as 220°C to 260°C, would increase the time to achieve a complete cure. Uemura provides no teaching or suggestion whatsoever that increasing the cure time is at all desirable. Thus, one of ordinary skill in the art would not modify the Uemura process to use a

lower temperature for its second baking step, since doing so would prolong the 30 minute curing step.

The examiner cited *In Re Aller* in support of the assertion that it would have been obvious to modify Uemura's second baking temperature, on the ground that the recited temperature range of "220°C and about 260°C" represents an optimum range. As discussed above, however, Uemura teaches the second bake step to "completely cure" the resin. Uemura is totally silent as to any suggestion that a lower bake temperature would improve performance, or is otherwise desirable. In fact, a lower bake temperature would require a longer bake time. Since any increases in process time is typically something to avoid, one of ordinary skill in the art attempting would not at all consider a curing temperature lower than 300°C to be an optimum temperature.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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